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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,701	08/09/2006	Nigel Cronin	0934-0046	8164
70653 7590 09/28/2011 LAW OFFICES OF EUGENE M. CUMMINGS, P.C. ONE NORTH WACKER DRIVE SUITE 4130 CHICAGO, IL 60606				
EXAMINER				
ROANE, AARON F				
ART UNIT		PAPER NUMBER		
3769				
MAIL DATE		DELIVERY MODE		
09/28/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/561,701

Applicant(s)

CRONIN, NIGEL

Examiner

AARON ROANE

Art Unit

3769

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-5, 7 and 9-13 is/are pending in the application.
- 5a) Of the above claim(s) 3 and 4 is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1, 2, 5, 7 and 9-13 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 22 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-800)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s) Mail Date ____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 7 and 9-13 rejected under 35 U.S.C. 102(b) as being anticipated by Berube (U.S. Patent 6,287,302).

Regarding claims 1, 2, 5, 7 and 9-13, Berube discloses the claimed invention as shown in col. 8:45 – col. 10:61 and figures 1-7, including the dielectric body (dielectric 26 and 30), reflector (16), antenna (17) and coaxial conductors (12 and 13).

Response to Arguments

Applicant's arguments filed 07/07/2011 have been fully considered but they are not persuasive.

Regarding Applicant's argument/remarks on page 5, 2nd full paragraph, Applicant asserts "Berube does not disclose the radiation reflector at the interface between two of the sections of the dielectric body as defined in claim 1." The reflector 16 clearly reflects and redirects

electromagnetic radiation as seen in figure 3 and col. 7:15-29. Additionally the distal face of the reflector is clearly disposed at the interface between the two sections of the dielectric body (26 and 30).

Additionally and furthermore, it should be noted “at the interface” is not narrowly interpreted as along the entire interface. It is believed by the examiner, that this is what Applicant is trying to define, that is, a reflector lying along the entire interface of the two sections of the dielectric body, essentially between the two sections of the dielectric body. If Applicant were to amend the claim in such a way, this reflector would be also be anticipated as the reflector of Berube would then be interpreted as the contact surface of the two different dielectric materials (30 and 26) wherein we see they have two different dielectric constants, see col. 8:40. Although they impedance match see the formula in col. 8:40, the constants are different and the formula in col. 8:40 reduces the power reflection, but there is reflection as it is a basic law of physics. There are no interfaces between different mediums (different constants) that have perfect (100%) transmission (T) (or refraction, R, as $T + R = 1$). Applicant is directed to any physics book covering electromagnetism for support of this statement (see for example, “Classical Electrodynamics,” 2nd Edition, by John David Jackson, published by John Wiley and Sons).

With respect to Applicant’s explanation of Berube, see 3rd paragraph on page 5, the examiner would only point out the that the “impedance matching” disclosed by Berube has more to do with the formula given in col. 8:40 and less to do permittivity. As far as the changing permittivity of tissue undergoing treatment, that is natural and excepted and there is no claimed subject matter precluding the rejection of the presently claimed invention by the Berube patent.

With respect to Applicant's comment on page 6, 1st full paragraph, the examiner finds it interesting that Applicant states the present invention isn't a waveguide. Applicant goes on to discuss a monopole antenna, and it appears that Applicant does not appreciate that antennas, antennae are themselves, specific types of waveguides.

Applicant goes on to argue/remark that Berube does not provide the function of the retention of matching (the examiner presumes Applicant is referring to impedance matching) of the load, in this case tissue as the tissue dries out, see the 2nd paragraph on page 6. This is moot, as none of the presently claimed invention is directed to this function. Although operational characteristics of an apparatus may be apparent from the specification, we will not read such characteristics into the claims when they cannot be fairly connected to the structure recited in the claims. See *In re Self*, 671 F.2d 1344, 1348, 213 USPQ 1, 5 (CCPA 1982). See *In re Prater*, 415 F.2d 1393, 162 USPQ 541 (CCPA 1969) and *In re Winkhaus*, 527 F.2d 637, 188 USPQ 129 (CCPA 1975).

Applicant is invited to request an interview to discuss suggestions to find an acceptable conclusion of the prosecution for all parties.

This action is made FINAL.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **AARON ROANE** whose telephone number is (571)272-4771. The examiner can normally be reached on Monday-Thursday 8:30AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam Chuan Yao can be reached on (571) 272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AARON ROANE/
Primary Examiner, Art Unit 3769